



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,789	10/22/2003	Harold Miyamura	200311340-1	5624

22879 7590 06/12/2007  
HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER
----------

BUI, HUNG S

ART UNIT	PAPER NUMBER
----------	--------------

2841

MAIL DATE	DELIVERY MODE
-----------	---------------

06/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/690,789

Applicant(s)

MIYAMURA ET AL.

Examiner

Hung S. Bui

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24, 26-29, 34-42 and 44-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12-24, 26-29, 34-35, 37-42 and 44-58 is/are rejected.
- 7) ☒ Claim(s) 7-11 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/22/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. The indicated allowability of claims 14-15, 34-35, 37-42, 44-48 is withdrawn in view of the newly discovered reference(s) to Beseth et al. [US 6,549,424]. Rejections based on the newly cited reference(s) follow.

### ***Claim Objections***

2. Examiner is considered the term "configured to" as well defined as an intended use limitation. The claim limitation that employ phrase of the type "configured to" is typical of claim limitation, which may not distinguish over prior art according to the principle. It has been held that the recitation that an element is "configured to" performing a function is not a positive limitation but only requires the ability to so perform, see *In re Venezia*, 189, USPQ 149 (CCPA 1976); for instance, claim 1, line 6; claim 5, line 2; claim 7, line 5; claim 29, line 3; claim 35, line 2; claim 45, line 2; claim 55, line 3; claim 57, line 2; claim 58, line 2.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 4-6, 35, 45 and 58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 2841

Regarding claim 4, lines 2-3, applicant states that a medial segment of at least one standard finger to extend through the at least one opening. Applicant should explain what exactly the term "one standard finger" means.

Regarding claim 5, lines 2-3, applicant states the at least one digit when the digit extends through the at least one opening. Applicant should explain exactly what the term "one digit" means.

Regarding claim 35, lines 2-3, applicant states that a medial segment of at least one standard hand digit to extend through the opening is in the retracted position. Applicant should explain more what exactly what the term "standard hand digit" means

Regarding claim 45, lines 2-3, applicant states that a medial segment of at least one average United States male adult finger to extend through the opening. Applicant should explain what exactly what the term "average United States male adult finger" means.

Regarding claim 58, lines 2-3, applicant states that the at least one standard hand digit to extend through the at least one opening. Applicant should explain what exactly what the term "one standard hand digit" means. Appropriate correction is required. Please disclose the specific section of the specification which describes this.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2841

invention was made to a person having ordinary skill in the art to which said subject matter pertains.  
+Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-4, 12-13, 16-17, 29, 34-35, 37, 41-42, 44-45, 47, 49-52, 54 and 57-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al. [US 6,549,424] in view of Pham et al. [US 4,885,436].

**Regarding claims 1-2 and 57**, Beseth et al. disclose a computing device module (230, figure 2) for receipt within a computing device chassis (220, figure 2, an unit rack 220 has an enclosure to enclose the module; call 220 for a chassis, hereinafter), the module comprising:

- an enclosure (250, figure 2, column 6, line 23);
- a handle (252, figure 2, column 6, line 12) movably coupled to the enclosure to move between an extended position and a retracted position (see the movable of the handle as shown in figures 3a-3c), wherein the handle extends along only a single transverse side of the enclosure (see figure 2) when in the retracted position, wherein the chassis includes one of a detent (268, figure 2, column 6, line 29) and a detent-engaging structure (254, figure 2, column 6, line 14) and wherein the handle includes the other of detent (270, figure 2, column 6, line 44) and the detent-engaging structure wherein the detent-engaging structure engages the detent to retain the module within the chassis when the handle is in the retracted position and wherein the detent-engaging structure is withdrawn from the detent to permit withdrawal of the module from the chassis when the handle is in the extended position.

Beseth et al. disclose the instant claimed invention except for the handle including at least one opening configured to permit at least one standard hand digit to extend through the at least one opening when the handle is in the retracted position.

Pham et al. disclose a computing device (figure 1) having a handle (34, figure 1, column 4, line 35) movably coupled to an enclosure (4, figure 1, column 4, line 26), wherein the handle has a continuously bounded opening (an opening 74, figure 4a, column 4, line 35, a bounded opening as claimed in claims 2 and 57) configured to permit at least one standard hand digit to extend through the opening when the handle is in the retracted position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add an opening design of Pham et al. on the handle of Beseth et al., for the purpose of enabling to retract the module from the chassis by a finger.

**Regarding claim 3**, Beseth et al. disclose the instant claimed invention except for the specific of the opening on the handle.

Pham et al. appear to disclose the at least one opening is configured to permit a standard thumb and a standard forefinger to be pinched together through the at least one opening when the handle is in the retracted position (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the specific size of the opening design of Pham et al., in Beseth et al., for the purpose of enabling retraction the module from the chassis.

**Regarding claim 4**, Beseth et al. disclose the instant claimed invention except for the specific of the opening on the handle.

Pham et al. appear to disclose the at least one opening is configured to permit a medial segment of at least one standard finger to extend through the at least one opening when the handle is in the retracted position (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the specific size of the opening design of Pham et al., in Beseth et al., for the purpose of enabling retraction the module from the chassis.

**Regarding claim 12**, Beseth et al. disclose the handle pivots between the extended position and the retracted position about an axis (253, figure 2, column 6, line 15 and see figures 3b-3c).

Beseth et al. disclose the instant claimed invention except for the axis being perpendicular to the opening.

Pham et al. disclose the opening being mounted perpendicular to a front surface of the module (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the position of mounting design of the opening of Pham et al. on the surface of the handle of Beseth et al. (the plane of the opening is parallel with an axis Y-Y which is perpendicular to the pivot axis V-V as shown in the figure 2) which is perpendicular to the axis, for the purpose of providing maximum strengthening momentum force to retract the module therefrom the chassis.

**Regarding claim 13**, Beseth et al. disclose the instant claimed invention except for the handle including a retainer releasably retaining the handle in the retracted position.

Art Unit: 2841

Pham et al. disclose the handle including a retainer (270, figure 2, column 6, line 41) releasably retaining the handle in the retracted position (see figure 3b-3c).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the retainer design of Pham et al. in Beseth et al., in order to lock/unlock the module in therefrom the chassis.

**Regarding claim 16**, Beseth et al., as modified, disclose wherein the enclosure has a side wall extending in a first plane and wherein at least one a majority of the handle extends in a second plane parallel to the first plane (see figure 2).

**Regarding claim 17**, Beseth et al. disclose the handle having an arm portion (252, figure 2, column 6, line 13), wherein the arm portion is substantially received within a recess/slot (268, figure 3a, column 6, line 38) when the handle is in the retracted position such that a majority of the arm portion is concealed.

Beseth et al. disclose the instant claimed invention except for the handle having a grasping portion including an opening.

Pham et al. disclose a handle (34, figure 1, column 4, line 35) having a grasping portion (see figure 1) including an opening (an opening 74, figure 4a, column 4, line 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a grasping portion with the opening thereon of Pham et al. on the handle of Beseth et al., for the purpose of enabling to retract the module from the chassis by a finger.

**Regarding claim 29**, Beseth et al., as modified, disclose wherein the computing device includes a first connector portion (266, figure 2, column 6, line 28) and wherein the



Art Unit: 2841

module includes a second connector portion (260, figure 2, column 6, line 32) configured to transmit signals between the module and the computing device, wherein the chassis includes one of a detent and a detent-engaging structure and wherein the handle includes the other of the detent and the detent-engaging structure, wherein the handle pivots between the extended position and the retracted position and wherein during pivoting of the handle from the extended position towards the retracted position, the detent and detent-engaging structure are in engagement so as to urge the module into the chassis and so as to urge the second connector portion into complete connection with the first connector portion (referred back to claim 1).

**Regarding claims 34-35 and 58,** Beseth et al. disclose a computing device module (230, figure 2) for receipt within a computing device chassis (220, figure 2, an unit rack 220 has an enclosure to enclose the module; call 220 for a chassis, hereinafter), the module comprising:

- an enclosure (250, figure 2, column 6, line 23), the enclosure having a recess (268, figure 2, column 6, line 29) extending on entirely on side of the enclosure; and
- a handle (252, figure 2, column 6, line 12) including: an arm portion (252, figure 2, column 6, line 13) pivotally coupled to the enclosure so as to pivot between a retracted position in which the arm portion is received within the recess such that a majority of the arm portion is concealed and an extended position, wherein the arm portion extends in a first plane (a vertical right side of the enclosure as shown in figure 2).

Beseth et al. disclose the instant claimed invention except for the handle including a grasping portion extending from the arm portion in a second plane with parallel to the first plane.

Pham et al. disclose a computing device (figure 1) having arm portion (34, figure 1, column 4, line 35) movably coupled to an enclosure (4, figure 1, column 4, line 26), wherein the arm portion has a grasping portion (an opening 74, figure 4a, column 4, line 35), wherein the grasping portion includes at least one opening (74, figure 4a, as **claims 35 and 58**) configured to permit a medial segment of at least one standard hand digit to extend through the opening when the hand is in the retracted position, extending from the arm portion in a plane with perpendicular to a front plane surface (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a grasping portion design of Pham et al. on the arm portion of Beseth et al., for the purpose of enabling to retract the module from the chassis by a finger.

**Regarding claim 37**, Beseth et al. disclose wherein the chassis includes one of a detent (268, figure 2, column 6, line 29) and a detent-engaging structure (254, figure 2, column 6, line 14) and wherein the lever arm portion includes the other of detent (270, figure 2, column 6, line 44) and the detent-engaging structure and wherein the detent-engaging structure engages the detent to retain the module within the chassis when the handle is in the retracted position and wherein the detent-engaging structure is withdrawn from the detent to permit withdrawal of the module from the chassis when the handle is in the extended position, wherein the handle pivots between the extended

Art Unit: 2841

position and the retracted position and wherein during pivoting of the handle from the extended position towards the retracted position, the detent and detent-engaging structure are in engagement so as to urge the module into the chassis (see figures 3c-3a).

**Regarding claim 41**, Beseth et al. disclose a module (230, figure 2) for receipt within a chassis (220, figure 2, an unit rack 220 has an enclosure to enclose the module; call 220 for a chassis, hereinafter) of a computing device, the module comprising:

- at least one electronic component (277, figure 2, column 6, line 57);
- first means (250, figure 2, column 6, line 23) for supporting the at least one electronic component; and
- a second means (252, figure 2, column 6, line 12) coupled to the first means for being manually moved between a first position in which the second means retains the module within the chassis when the module is inserted into the chassis and a second position permitting withdrawal of the module from the chassis and for being moved from the second position to the first position to urge the module into the chassis (see movable of the second means as shown in figures 3a-3c), wherein the second means extends along a transverse side of the module when in the first position (see figure 2).

Beseth et al. disclose the instant claimed invention except for the second means including at least one grasping surface.

Pham et al. disclose a computing device (figure 1) having a first means (enclosure 4, figure 1, column 4, line 26) and a second means (handle 34, figure 1,

Art Unit: 2841

column 4, line 35) attached to the first means, wherein the second means includes a grasping element (an opening 74, figure 4a, column 4, line 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a grasping element design of Pham et al. on the first means of Beseth et al., for the purpose of enabling to retract the module from the chassis by a finger.

**Regarding claim 42**, Beseth et al. disclose a computing device module (230, figure 2) for receipt within a computing device chassis (220, figure 2, an unit rack 220 has an enclosure to enclose the module; call 220 for a chassis, hereinafter), the module comprising:

- an enclosure (250, figure 2, column 6, line 23);
- a handle (252, figure 2, column 6, line 12) movably coupled to the enclosure to move between an extended position and a retracted position (see the movable of the handle as shown in figures 3a-3c), wherein the chassis includes one of a detent (268, figure 2, column 6, line 29) and a detent-engaging structure (254, figure 2, column 6, line 14) and wherein the handle includes the other of detent (270, figure 2, column 6, line 44) and the detent-engaging structure wherein the detent-engaging structure engages the detent to retain the module within the chassis when the handle is in the retracted position and wherein the detent-engaging structure is withdrawn from the detent to permit withdrawal of the module from the chassis when the handle is in the extended position, wherein the handle has a lever arm portion (252,

figure 2, column 6, line 12), wherein the lever arm portion extends along only a single transverse side of the enclosure when the handle is in the retracted position, wherein the lever arm portion is substantially receive within a recess ( ) such that a majority of the lever arm portion is concealed within the recess when the handle is the retracted position.

Beseth et al. disclose the instant claimed invention except for the handle including a grasping portion.

Pham et al. disclose a computing device (figure 1) having a handle (34, figure 1, column 4, line 35) movably coupled to an enclosure (4, figure 1, column 4, line 26), wherein the handle has a grasping portion (an opening 74, figure 4a, column 4, line 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a grasping portion design of Pham et al. on the handle of Beseth et al., for the purpose of enabling to retract the module from the chassis by a finger.

**Regarding claim 44**, Beseth et al., as modified, disclose the handle pivoting onto the enclosure between the extended position and the retracted position (see figures 3a-3c).

**Regarding claim 45**, Beseth et al. disclose the instant claimed invention except for the grasping portion including an opening configured to permit a medial segment of user's finger to extend through the opening when the handle is in the retracted position.

Pham et al. disclose the grasping portion including a finger opening (a finger opening 74, figure 4a, column 4, line 35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a finger opening design of Pham et al., in Beseth et al., for the purpose of enabling retraction the module therefrom the chassis.

**Regarding claim 47**, Beseth et al., as modified, disclose a retainer (270, figure 2, column 6, line 42) releasably retaining the handle in the retracted position.

**Regarding claims 49-50 and 52**, the method for positioning a module relative to a chassis of a computing device would have been necessitated by the product structure as disclosed in the above claims 1-4.

**Regarding claim 51**, the method for positioning a module relative to a chassis of a computing device would have been necessitated by the product structure as disclosed in the above claims 1-4 in combination with claims 9-11.

**Regarding claim 54**, Beseth et al. disclose the handle plane that is perpendicular to the axis V-V (see figure 2).

Beseth et al., disclose the instant claimed invention except for the handle plane having at least one opening.

Pham et al. disclose a computing device (figure 1) having a handle (34, figure 1, column 4, line 35) movably coupled to an enclosure (4, figure 1, column 4, line 26), wherein the handle has an opening (an opening 74, figure 4a, column 4, line 35), wherein a plane to have the opening is perpendicular to an axis (axis 38, figure 1, column 3, line 47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add an opening design of Pham et al. on the handle plane of

Art Unit: 2841

Beseth et al., for the purpose of enabling to retract the module from the chassis by a finger.

7. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claims 1 and 5 above, and further in view of Lee et al. [US 6,606,256].

**Regarding claim 5**, Beseth et al., as modified, disclose the instant claimed invention except for the specific of the opening including an arcuate surface configured to engage the at least one digit when the digit extends through the at least one opening.

Lee et al. disclose a handle door (106, figure 1, column 2, line 39) having an opening (112, figure 1, column 2, line 49) including an arcuate surface configured to engage the at least one digit when the digit extends through the at least one opening (see figures 1-2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the opening design of Lee et al. for the opening of Pham et al., in Beseth et al., for the purpose of enabling retraction the module from the chassis easily.

**Regarding claim 6**, Beseth et al., as modified, disclose the instant claimed invention except for the specific of the opening being a circular.

Pham et al. disclose the at least one opening being a circular (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the circular shape for the opening on the handle of Beseth et

Art Unit: 2841

al., as modified, as suggested by Pham et al., for the purpose of enabling retraction the module by a finger.

8. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claims 13 and 14 above, and further in view of Kalkbrenner [US 6,754,085].

**Regarding claim 14**, Beseth et al. disclose the retainer includes a first threaded hole (272, figure 2, column 6, lines 42-43) cooperated with a second threaded portion (270, figure 2, column 6, line 41) coupled to the handle and screwed to the first threaded hole (see figures 2 and 3a).

Beseth et al., as modified, disclose the instant claimed invention except for the threaded hole instead of a threaded portion.

Kalkbrenner discloses a threaded mechanism (500, figure 5, column 4, line 3) having a first threaded space portion (132i-j, figure 5) and a second threaded portion (140, figure 5) secured with the first threaded portion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the threaded space portion design of Kalkbrenner for the threaded portion of Beseth et al., as modified, for the purpose of providing spacer to make evenly for the handle level in parallel with a front surface of the enclosure.

**Regarding claim 15**, Beseth et al., as modified, disclose the retainer includes a thumb screw (see a shape of the screw 270 as shown in figure 2) coupled to the handle and providing the second threaded portion, wherein the thumb screw is configured to serve



Art Unit: 2841

as a lifting surface for supporting a weight of the module upon removal of the module from the chassis.

9. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claims 17 and 18 above, and further in view of Joslin [US 5,669,512].

**Regarding claims 18-19**, Beseth et al., as modified, disclose the instant claimed invention except for the specific thickness of the arm portion about maximum thickness 2.2mm or 3.0mm.

Joslin discloses an injector/ejector (figures 8-12) having a thickness of approximate 2.95mm to 3.45mm (column 7, line 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use have about maximum 2.2mm (or 3.0 mm) of Beseth et al., as modified, as suggested by Joslin, for the purpose of providing strengthening to the handle that can retract the module therefrom the chassis, and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

10. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claims 18 above, and further in view of Lee et al.

**Regarding claim 20**, Beseth et al., as modified, disclose the instant claimed invention except for the arm portion being formed from sheet metal.

Art Unit: 2841

Joslin disclose the ejector/injector being formed of a metal (column 8, lines 46-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the metal to form a handle of Beseth et al., as suggested by Joslin, for the purpose of strengthening the handle that support to retract the module therefrom the chassis.

Lee et al. disclose the handle being formed of a sheet shape (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the handle shape design of Lee et al., formed of a metal design of Joslin in Beseth et al., as modified, for the purpose of saving space being occupied by the handle structure.

11. Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claim 20 above, and further in view of Angell [US 4,693,438].

**Regarding claim 21**, Beseth et al., as modified, disclose the instant claimed invention except for the sheet metal being formed of galvanized metal.

Angell discloses an electronic device being made from a sheet metal (column 3, line 25) which is formed of a galvanized metal (column 3, line 26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the galvanized material for the handle of Beseth et al., as modified, as suggested by Angell; for the purpose of corroding surface of the handle

Art Unit: 2841

because the galvanized steel has gone through a chemical process to keep it from corroding.

**Regarding claim 22**, Beseth et al., as modified, disclose the instant claimed invention except for the specific thickness of the sheet metal of about 1.5mm.

Angell discloses an electronic device (figures 1-2) being formed of a galvanized sheet metal (column 3, line 26), wherein the sheet metal has a thickness about 0.4mm (column 3, line 25-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the thickness of the sheet metal about 1.5mm of Beseth et al., as suggested by Angell, for the purpose of providing a strength enough to the handle to retract the module from the chassis, and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

12. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claim 1 above, and further in view of D'Alessandro [US 3,685,005].

**Regarding claim 23**, Beseth et al. disclose the instant claimed invention except for the handle being formed of a material that has a yield strength of at least about 16,000 psi.

Official notice is taken that it is well known to use a material that has a yield strength of at least about 16,000psi, such as alloy; for instance, D'Alessandro uses

Art Unit: 2841

aluminum which has a yield strength about 16,000psi to make a sealed connector (column 4, lines 26-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the material having a yield strength about 16,000psi, for the handle of Beseth et al., as modified, as suggested by D'Alessandro, for the purpose of reducing weight of the product (column 5, lines 66-67) and providing a strong momentum to retract a module from a chassis.

13. Claims 24, 48 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claim 1 above, and further in view of Reiter et al. [US 5,557,499].

**Regarding claims 24 and 48**, Beseth et al., as modified, disclose the module having the handle including arm portion and a grasping portion forming the opening and wherein the grasping portion extends in a plane perpendicular to the face of the module (referred to previously rejected claims 1 and 17).

Beseth et al., as modified, disclose the instant claimed invention except for the module including at least one light-emitted display (LED) extending along a face of the module.

Reiter et al. disclose a module having at least one (8, LED) being mounted on a surface of the module (figure 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the LED with the module of Beseth et al., as modified, as

Art Unit: 2841

suggested by Reiter et al., for the purpose of indicating the status of the module completely retain with the chassis.

**Regarding claim 56**, Beseth et al., as modified, disclose the handle extends on a single transverse side of the enclosure.

Beseth et al., as modified, disclose the instant claimed invention except for the module including at least one light-emitted display (LED) extending along a face of the module.

Reiter et al. disclose a module having at least one (8, LED) being mounted on a surface of the module (figure 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the LED with the module of Beseth et al., as modified, as suggested by Reiter et al., for the purpose of indicating the status of the module completely retain with the chassis.

14. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claim 1 above, and further in view of Kaern [US 2003/0168365].

**Regarding claim 26**, Beseth et al. disclose the instant claimed invention except for the opening has at least one dimension at least 18 mm.

Pham et al. disclose the handle having a finger opening (74, figure 4a-4b, column 4, line 35), Pham et al. does not disclose a dimension at least 18 mm. As well known for a dimension of a user's finger size is about 10-40mm, as taught as by Kaern (page

Art Unit: 2841

2, paragraph 0021, lines 4-8). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a 18mm dimension for the finger opening in the handle of Beseth et al., in view of Pham et al. and Kaern, for the purpose of enabling user's finger to retract the module therefrom the chassis.

15. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claim 1 above, and further in view of Unrein [US 6,490,157].

**Regarding claim 27**, Beseth et al., as modified, disclose the instant claimed invention except for the module comprising a power supply therein.

Unrein discloses an electronic module (105, figures 1b-c, column 3, line 42) including a power supply (column 3, line 43) to provide power to components therein.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the power supply into the module of Beseth et al., as modified, as suggested by Unrein, for the purpose of providing power to the electronic device.

16. Claims 28, 53, 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claims 1 and 53 above, and further in view of Bovell [US 2003/0161118].

**Regarding claim 28**, Beseth et al., as modified, discloses the instant claimed invention except for the enclosure including at least one air flow opening extending along a first

Art Unit: 2841

plane and wherein the handle extends substantially within a second plane perpendicular to the first plane.

Bovell discloses an enclosure (2, figure 1, page 1, paragraph 0014, line 1) including at least one air-flow opening extending along a first plane (front panel or vertical plane surface) and wherein the handle extends substantially within a second plane (a horizontal plane as shown in figure 4) perpendicular to the first plane (figures 2 and 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the airflow opening design of Bovell in Beseth et al., as modified, in order to allow air flow through the opening to dissipate heat of the electronic device.

**Regarding claim 53**, Beseth et al., as modified, disclose the handle extends on a single transverse side of the enclosure when the retracted position.

Beseth et al., as modified, disclose the instant claimed invention except for the enclosure having at least one air-flow opening.

Bovell further discloses the enclosure including at least one air-flow opening extending along a first plane (a front plane surface as shown in figure 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the airflow opening design of Bovell in Beseth et al., as modified, in order to allow air flow through the opening to dissipate heat of the electronic device.

Art Unit: 2841

**Regarding claim 55**, Beseth et al., as modified, wherein the enclosure includes a recess (268, figure 2) on a transverse side of the front panel and wherein the recess is configured to receive a portion of the handle such that a majority of the handle is concealed within the recess when the handle is in the retracted position.

Beseth et al. disclose the instant claimed invention except for the front panel having at least one air-flow opening.

Bovell further discloses the enclosure including at least one air-flow opening extending along a front plane (a front plane surface as shown in figure 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the airflow opening design of Bovell in Beseth et al., as modified, in order to allow air flow through the opening to dissipate heat of the electronic device.

17. Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., in view of Pham et al., as applied to claim 34 above, and further in view of Joslin [US 5,669,512].

**Regarding claims 38-39**, Beseth et al., as modified, disclose the instant claimed invention except for the specific thickness of the arm portion about maximum thickness 3.0mm or 4.0mm.

Joslin discloses an injector/ejector (figures 8-12) having a thickness of approximate 2.95mm to 3.45mm (column 7, line 50).



Art Unit: 2841

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use have about maximum 2.2mm (or 3.0 mm) of Beseth et al., as modified, as suggested by Joslin, for the purpose of providing strengthening to the handle that can retract the module therefrom the chassis, and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

18. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., in view of Pham et al., as applied to claim 34 above, and further in view of Joslin and Lee et al.

**Regarding claim 40**, Beseth et al., as modified, disclose the instant claimed invention except for the arm portion being formed from sheet metal.

Joslin discloses the ejector/injector being formed of a metal (column 8, lines 46-47).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the metal to form a handle of Beseth et al., as modified, as suggested by Joslin, for the purpose of strengthening the handle that support to retract the module therefrom the chassis.

Lee et al. disclose the handle being formed of a sheet shape (see figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the handle shape design of Lee et al., formed of a metal

Art Unit: 2841

design of Joslin in Beseth et al., as modified, for the purpose of saving space being occupied by the handle structure.

19. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beseth et al., as modified, as applied to claim 42 above, and further in view of Joslin [US 5,669,512] and D'Alessandro [US 3,685,005].

**Regarding claim 46**, Beseth et al., as modified, disclose the instant claimed invention except for the specific thickness of the arm portion about maximum thickness 3.0mm and is formed from a material having a yield strength of at least about 16,000psi.

Joslin discloses an injector/ejector (figures 8-12) having a thickness of approximate 2.95mm to 3.45mm (column 7, line 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use have about maximum 2.2mm (or 3.0 mm) of Beseth et al., as modified, as suggested by Joslin, for the purpose of providing strengthening to the handle that can retract the module therefrom the chassis, and since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Official notice is taken that it is well known to use a material that has a yield strength of at least about 16,000psi, such as alloy; for instance, D'Alessandro uses aluminum which has a yield strength about 16,000psi to make a sealed connector (column 4, lines 26-38).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the material having a yield strength about 16,000psi, for the handle of Beseth et al., as modified, as suggested by D'Alessandro, for the purpose of reducing weight of the product (column 5, lines 66-67) and providing a strong momentum to retract a module from a chassis.

***Allowable Subject Matter***

20. Claims 7-11 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 7 states that the limitation "wherein the detent engaging structure is configured to extend in a direction non-parallel to the axis into the detent when the handle is in the retracted position." This limitation, in conjunction with other limitation as claimed in the claim 7, was neither found to be disclosed in, nor suggested by the prior art. Claims 8-11 are depended on the previous claim 7. Claim 36 states that the limitation "wherein the grasping portion extends from the recess by a distance of at least 7 mm when the handle is in the retracted position." This limitation, in conjunction with other limitation as claimed in the claim 34, was neither found to be disclosed in, nor suggested by the prior art.

Art Unit: 2841

***Response to Arguments***


21. Applicant's arguments with respect to claims 1-24, 26-29, 34-43, 44-58 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung S. Bui whose telephone number is (571) 272-2102. The examiner can normally be reached on Monday-Friday 8:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean A Reichard can be reached on (571) 272-1984. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
06/04/2007  
**Hung Bui**  
**Art Unit 2841**